

WHAT IS CLAIMED IS:

1. Method of using an aluminosilicate ion exchange material for delivering effervescency in a detergent product, characterized by the steps of:
 - providing an aluminosilicate ion exchange material having pores;
 - drying said aluminosilicate ion exchange material;
 - entrapping a gas into said pores of said aluminosilicate ion exchange material;
 - adding said aluminosilicate ion exchange material having gas entrapped therein to a detergent composition; and
 - forming a detergent product exhibiting effervescency when said detergent product is placed in an aqueous medium.
2. The method according to claim 1, wherein the aluminosilicate ion exchange material has a formula, $Mm/n [(AlO_2)_m(SiO_2)_y] \cdot xH_2O$, where n is the valence of the cation M, x is the number of water molecules per unit cell, m and y are the total number of tetrahedra per unit cell, and y/m is 1 to 100, and wherein M is selected from the group consisting of sodium, potassium, magnesium, and calcium.
3. The method according to any of claims 1-2, wherein said aluminosilicate ion exchange material is zeolite.
4. The method according to any of claims 1-3, wherein said aluminosilicate ion exchange material further acts as a builder in said detergent product.
5. The method according to any of claims 1-4, wherein said aluminosilicate ion exchange material has pores having a pore diameter in a range of from 2 ANGSTROMS to 12 ANSTROMS.
6. The method according to any of claims 1-5, wherein said aluminosilicate ion exchange material has a total porosity of at least 25 %.

7. The method according to any of claims 1-6, wherein said gas is carbon dioxide.
8. The method according to any of claims 1-7, including heating said aluminosilicate ion exchange material to a temperature of at least 20 degrees C before entrapping said gas within said pores of said aluminosilicate ion exchange material.
9. The method according to any of claims 1-8, including placing said aluminosilicate ion exchange material inside a pressurizable container and entrapping said gas into said pores of said aluminosilicate ion exchange material at a gas pressure of at least 1 atmosphere.
10. The method according to any of claims 1-9, wherein said aluminosilicate ion exchange material having gas entrapped therein is added to said detergent composition in an amount in a range of from 1 % to 25 % by weight of said detergent composition.
11. The method according to any of claims 1-10, wherein said detergent composition is free of citric acid and bicarbonates.
12. A laundry detergent product, characterized by:
a laundry detergent composition including a surfactant and a builder;
wherein said builder is adapted to deliver a combination of building properties and effervescency properties to said laundry detergent composition;
said builder including an aluminosilicate ion exchange material of the formula,
 $Mm/n [(AlO_2)_m(SiO_2)_y] \cdot xH_2O$ where n is the valence of the cation M, x is the number of water molecules per unit cell, m and y are the total number of tetrahedra per unit cell, and y/m is 1 to 100, and wherein M is selected from the group consisting of sodium, potassium, magnesium, and calcium, said aluminosilicate ion exchange material having pores, and said aluminosilicate ion exchange material having a gas entrapped within said pores; and

said detergent product exhibiting effervescency when said detergent product is placed in an aqueous medium.

13. The laundry detergent product according to any of claims 1-12, including a zeolite having carbon dioxide gas entrapped therein, said zeolite being present in said laundry detergent composition in an amount in a range of from 1% to 25 % by weight.
14. The laundry detergent product according to any of claims 1-13, wherein said laundry detergent product is in a particulate form.
15. The laundry detergent product according to any of claims 1-14, wherein said laundry detergent product is in a non-particulate form.
16. The laundry detergent product according to any of claims 1-15, further characterized by adjunct detergent ingredients selected from the group consisting of enzymes, soil release agents, dispersing agents, optical brighteners, suds suppressors, fabric softeners, enzyme stabilizers, perfumes, dyes, fillers, dye transfer inhibitors, and mixtures thereof.

PDD
at
D'